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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/722,610	11/26/2003	Gerald James Hess JR.	4069 / GETS 5294.2	7096

321 7590 05/25/2005

SENNIGER POWERS LEAVITT AND ROEDEL  
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ST LOUIS, MO 63102

EXAMINER

LE, MARK T

ART UNIT PAPER NUMBER

3617

DATE MAILED: 05/25/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/722,610

Applicant(s)

HESS ET AL.

Examiner

Mark T. Le

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 01 April 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 67-82 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 67-82 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### **DETAILED ACTION**

1. This communication is responsive to the RCE, filed on April 1, 2005. Applicant's Amendments after Final, filed on February 28, 2005, has been entered. Applicant's arguments are deemed moot in view of the new ground of rejection set forth below.
2. Claims 67-82 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nickles (US 4,344,364) in view of Nickles (US 6,144,901).

Nickles '364 discloses a system for control a consist, similar to that recited in the instant claims, including communication link 8, first processing module 2, and second processing module 4; wherein, the first and second processing modules determine the power operating modes of the respective locomotives that have said first and second processing modules. It is noted that Nickles '364 does not describe that the power operating modes are determined as a function of a determined fuel or power consumption rate of at least one of the locomotives, as claimed.

Nickles '901, Figure 8, shows the process of determining an optimal throttle setting (an optimal power operating mode), which involves the input of locomotive performance information. As indicated in column 8, lines 57-59 of Nickles '901, the locomotive information includes various factors comprising fuel consumption as related to power control settings. Accordingly, the power operating mode of Nickles '901 is determined as a function of fuel consumption rate.

In view of Nickles '901, it would have been obvious to one skilled in the art to modify the system of Nickles '364 to determine the power operating modes as a function of various inputs, including fuel consumption rate, in a manner similar to that suggested

by Nickles '901, so as to enhance the efficiency and effectiveness of the system.

Regarding the instant claimed link to a GPS, consider column 5, lines 9-10 of Nickles '910, wherein, the use of a GPS is suggested to determine the position of the consist for use as an input in determining the power operating mode.

As to the instant claimed determination being a function of a power consumption rate, note that fuel produces power; therefore, the power of operating modes of Nickles '364, as modified, are also readable as being determined as a function of power consumption rate as claimed.

Regarding the instant claimed power operating mode of a locomotive in which a crew is riding being less than the power operating mode of a locomotive in which a crew is not riding, consider the power operating modes for optimum throttle settings shown in Table III of Nickles '364; wherein, the first four settings listed in Table III meet the instant claimed limitation. Regarding the instant claimed power operating modes being a function of a location of a crew member, note that the position of master locomotive 2 in the consist of Nickles '364 is the same as the location of a crew member, and that the power settings for the power operating modes of Nickles '364 are made also on the basis of the position and other conditions of the master locomotive; therefore, the instant claimed power operating modes of Montgomery are inherently a function of the location of a crew member, as broadly recited in the instant claim.

Regarding the instant claimed wireless communication, consider column 5, lines 1-4 of Nickles '901; wherein, the use of radio communication is suggested. In view of Nickles '901, it would have been obvious to one skilled in the art to change the wired

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communication of Nickles' 364 to a wireless communication system, as suggested by Nickles '901, so as to avoid complications associating with wirings.

3. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark T. Le whose telephone number is 571-272-6682. The examiner can normally be reached on Mon-Fri (8:00-5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Samuel Morano can be reached on 571-272-6684. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Mark T. Le  
Primary Examiner  
Art Unit 3617

mle  
5/22/05